



Analyzing the efficacy of improvisational music therapy as a treatment method for children with Autism Spectrum Disorder

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Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is a developmental disorder with presenting deficits in social responsiveness and expressive and receptive language. ASD has no single identified cause and the available data suggests ASD results from a combination of genetic, neurobiological, and environmental factors that manifest in characteristic behavioral symptoms with no known cure.

For children with ASD, music therapy has historically been used to target communication, expressive language, speech production, intonation, fluency, echolalia, receptive language, identification, choice making, social skills, imitation, active participation, turn-taking, eye gaze, play, self-expression, relaxation, psychological enrichment, behavior, joint attention, motor skills, memory, categorization, sensory exploration, and musical skills.



Improvisational Music Therapy

IMT is the interactive use of live music for engaging clients to meet their therapeutic needs. In the included studies, the music therapists used a variety of stimuli including guitar, piano, percussion, singing, rhythm exercises, clapping, movement and dancing, pitch discrimination games, memorization tasks, and auditory cueing.

Methods

This review included fourteen studies.

Inclusion criteria

- a.) within the last ten years
- b.) children between the ages of 0-20
- c.) confirmed diagnosis of ASD
- d.) tested improvisational music therapy as a treatment method using standardized data collection measures

The Studies:

- average of 20 weeks
- 1-3 days per week
- >30 min; <60 min
- individual, group, and family treatment settings.
- varied in amount of free play versus direct instruction by age and ability, though most used a combined approach.

Results

Joint Attention	Eye Gaze
Turn-Taking	Selective Attention
Expressive Language	Social-Emotional Reciprocity
Motor Skills	Emotional Synchrony, Joy & Mood

Based on the included studies, improvisational music therapy has the potential to be an effective treatment method for children with Autism Spectrum Disorder, significantly improving their skills in the above areas. These skills are particularly impaired in children with ASD and are imperative for effective communication. Improvisational music therapy improves the overall communication abilities of children with ASD, but determining the extent garners further research.

Incorporating IMT in Speech & Language Therapy

Many children with ASD have an ability to perceive and remember isolated pitches and identity the contour of melodic fragments, which translates to improving the child's ability to vocalize musically and improve articulation and vocal quality. The rhythmic and repetitive aspects of music may also improve general mood and behavior for children with ASD. Clinically, SLPs should focus on integrating IMT with play therapy based on each child's individual needs and abilities.

Tips & Tricks

- Use a combination of singing and instrument play, especially percussion
- For nonverbal children, give them a motion to do instead of singing
- Establish a "hello song" and "goodbye song" that stays consistent every session
- Choose other songs based on speech and language goals
- Give some options and let them choose (both songs and instruments)
- Encourage social interaction



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